# COMMITTEE ON GOVERNMENT REFORM

***S**ubcommittee on **E**nergy and **R**esources*

***D**ARRELL **I**SSA, **C**HAIRMAN*

Oversight Hearing:

***"Strengthening the Nation's Water Infrastructure: The Army Corps of Engineers' Planning Priorities"***

*March 15, 2006, 2:00 p.m.*

*Room 2203 Rayburn Building*

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## *BRIEFING MEMORANDUM*

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## SUMMARY:


The Army Corps of Engineers (the Corps) is a federal agency in the Department of Defense with military and civilian responsibilities. At the direction of Congress, the Corps plans, builds, operates, and maintains a wide range of water resources facilities in US states and territories. The agency's traditional civil responsibilities are creating and maintaining navigable channels and controlling floods. In the last two decades, Congress has increased the Corps' responsibilities in ecosystem restoration, municipal water and wastewater infrastructure, disaster relief, and other activities. Congressional direction comes primarily through authorization and appropriations legislation and oversight activities.

The Water Resources Development Act (WRDA), a frequent reauthorization, is a more than $10 billion spending bill that authorizes many Corps infrastructure projects. The contents of each WRDA are cumulative and new Acts do not supercede or replace previous Acts. WRDA and the corresponding appropriations bill are packed with earmarks and directives given to the Corps on how to carry out activities. Funds appropriated are invariably less than authorized Corps projects. As a result, the Corps is challenged to meet a great number of competing priorities and mandates with limited funds. In response, the Corps has chosen to serially reprogram funds and move them from project to project on what may be viewed as either a "just-in-time" or "seat-of-the-pants" basis.

The Corps has also been under scrutiny since 2000 due to a series of investigative articles by the *Washington Post*, an Army Inspector General's report, and a National Academies of Science study that asserted Corps' planning deficiencies and oversight were resulting in unjustified projects moving forward in the approval process. A number of Government Accountability Office studies have raised questions regarding Corps' planning processes, priority-setting, and financial management. In response, the Corps has recently moved forward with an aggressive plan to address these deficiencies, update its planning and business practices, be more collaborative, and better match its changing civil works mission.

The Corps' challenges are extremely important to the strength of infrastructure of the United States. Existing water infrastructure is a result of the priority-setting, decisions, and projects constructed in decades past. For decades to come, infrastructure priorities set today will impact commerce, economic growth, electricity generation, the health of wetlands and ecosystems, and, most importantly, the safety of communities dependent on the Corps for flood protection. Because the level of Corps' funding is a persistent issue, it is all the more important that the operations of the Corps are efficient and result in the most benefit for every dollar spent.

This hearing will examine the how the Corps' sets its priorities and seeks to improve its planning processes and economic analysis. A well-functioning Corps is required to ensure that projects are economically justified and produce their intended effects, and that the civil works program strengthens the nation's critical infrastructure.

# BACKGROUND:

## ***The Role of the Corps***

The Corps is an agency within the Department of Defense that has military and civilian responsibilities in engineering. At Congress' direction, the Corps plans, constructs, operates, and maintains a wide range of water resources projects. A military Chief of Engineers oversees the Corps' civil and military operations and reports on civil works matters to the Assistant Secretary of the Army for Civil Works. The Corps operates as a military organization with a largely civilian workforce. It has approximately 34,600 civilian and 650 military personnel.

The Corps' civil works responsibilities date back to the early 19th century. Since then the Corps has traditionally focused on navigation and flood control projects in partnership with local sponsors. Navigation projects include river deepening, channel widening, lock expansion, dam operations, and dredged material disposal. Flood control projects include levees, floodwalls, dams, and river channelization. Many of these projects are multipurpose, with elements relating to water supply, recreation, and hydropower in addition to navigation or flood control. Construction of projects is normally subcontracted to private firms with Corps personnel involved in oversight and project management.

In recent decades, Congress has given the Corps responsibilities in the areas of environmental restoration, infrastructure, and other non-traditional activities, such as disaster relief and remediation of formerly used nuclear sites. Environmental restoration activities involve wetlands restoration and environmental mitigation activities for Corps projects. Environmental infrastructure refers to municipal water and wastewater facilities. The agency's regulatory responsibility for navigable waters extends to issuing permits for private actions that might affect wetlands and other waters of the United States.[1]

[1] Nicole T. Carter and Betsy A. Cody, *The Civil Works Program of the Army Corps of Engineers: A Primer*, Congressional Research Service, RS20866, 1-2.

***The Corps' Funding and Federal Cost-Sharing***

Most Corps activities and projects are governed and authorized by the Water Resources Development Act (WRDA). Contents of each WRDA are cumulative and new Acts do not supercede or replace previous Acts. Since the landmark 1986 WRDA that broke a 10-year impasse with the Executive Branch, WRDAs have been more frequent. However, the last enacted WRDA was in 2000, and other enacted WRDAs in the last 20 years occurred in 1986 (PL 99-662, 1988 (PL 100-676), 1990 (PL 101-640), 1992 (PL 102-580), 1996 (PL 104-303), 1999 (PL 106-53), and 2000 (PL 106-541). The most recent round of attempts to enact a WRDA have stumbled on a number of issues relating to the large scope of responsibilities assigned to the Corps.

In the 109th Congress, the House passed HR 2864 in July 2005, while the Senate has yet to bring its version of the bill, S 728, to the floor after having been reported out of committee. Both versions of the bill authorize Corps projects and activities at more than $10 billion, which is one issue of contention for Office of Management and Budget. Other contentious issues include the degree of regulatory authority assigned to the Corps, the specific projects to be authorized, and so-called "corps reform" efforts—a suite of modifications that includes Corps planning, operations, environmental mitigation efforts, and outside review of some Corps economic analyses.

As with most authorizations, OMB does not agree with the priorities set by Congress in preparing the President's budget.[2] At the same time, the Appropriations Committee balances Corps' funding with other federal needs—such as some Department of Energy activities—funded by the specific appropriations bill. Ultimately, numerous projects that are authorized do not receive appropriations or do so at reduced levels, but total appropriated funding is usually above the President's request.

The vast majority of Corps projects can be described as "earmarked." According to a March 2006 memorandum and research prepared by the Congressional Research Service, the FY 2006 Energy and Water Development Appropriations Act conference report included $4.75 billion for water projects and 1,767 individual earmarked water projects. Earmarks for FY 2006 represent 88 percent of the Corps' budget.

This creates a large backlog of accumulating projects for the Corps, often with local and congressional sponsors anxious to see their priorities move forward. And, rather than the Corps being proactive in setting priorities, the funding situation has contributed to a reactive posture on the part of the Corps, which often reprograms funds on a "just-in-time" basis according to perceived needs. The Government Accountability Office estimates that two-thirds of funds appropriated for specific projects in FY 2003 and FY 2004 were moved in or out of the Construction and General

[2] OMB is typically frugal in its budget request for Corps projects. OMB usually proposes to terminate a great number of projects and ongoing studies as well. Until the FY 2007 Budget, OMB budgeted Corps Operations and Maintenance (O&M) activities on a project rather than program basis. For FY 2007, OMB budgeted according to regions rather than projects to indicate the Administration's interest in giving the Corps some flexibility to address priorities according to needs as determined by the Corps.

Investigations Accounts, and information was not available for reprogramming in Operations & Maintenance accounts.[3]

Water resources projects that involve the Corps are cost-shared between the federal government and the local sponsor. Cost-share depends on the type of project and the stage of the planning process. Prior to WRDA 1986, as a general rule the federal government was responsible for a larger share of the costs of civil works projects. Below is a table prepared by the Congressional Research Service that indicates cost-sharing for Corps projects, with O&M referring to Operations and Maintenance activities.[4]

| Project Purpose | Maximum Federal Share of Construction | Maximum Federal Share of O&M |
|---|---|---|
| Commercial Navigation | | |
| Coastal Ports — | | |
| <20 ft. harbor | 80%* | 100% |
| 20-45 ft. harbor | 65%* | 100% |
| >45 ft. harbor | 40%* | 50% |
| Inland Waterways | 100%** | 100% |
| Flood Control | 65% | 0% |
| Hydroelectric Power | 0% | 0% |
| Municipal and Industrial Water Supply | 0% | 0% |
| Agricultural Water Supply | 65%*** | 0% |
| Recreation | 50% | 0% |
| Hurricane and Storm Damage Reduction | 65% | 0% |
| (except Periodic [Beach] Nourishment) | (50%) | (0%) |
| Aquatic Plant Control | not applicable | 50% |
| Environmental Restoration | | |
| Congressionally Authorized Projects | 65% | 0% |
| Beneficial Uses of Dredged Material and Modification for Improvement of Environment | 75% | 0% |

**Source:** 33 U.S.C. 2211-2215.

* These percentages reflect that the non-federal sponsors pay 10% of the cost of the general navigation features of the project over a period not to exceed 30 years.

** 50% is paid by federal appropriations, and 50% by the Inland Waterway Trust Fund.

*** For the 17 western states where reclamation law applies, irrigation costs are funded by the Corps but ultimately repaid by non-federal users.

[3] Government Accountability Office, *Army Corps of Engineers: Improved Planning and Financial Management Should Replace Reliance on Reprogramming Actions to Manage Project Funds*, September 2005, GAO-05-946.

[4] Besides the figures in the table, the federal cost share for reconnaissance studies and feasibility studies are different—reconnaissance studies are entirely a federal expense. Local sponsors pay 50 percent of the cost for feasibility studies, except for inland waterways which is a 100 percent federal responsibility. The project development and planning process is discussed in the next section.

***The Corps Project Development and Planning Process***[5]

The Corps usually becomes involved in a water resource project when the local community identifies a need and contacts the Corps for technical assistance. If the Corps does not have the statutory authority required to study the project, the Congress must provide authorization. After receiving authorization, and if funds are available, a Corps district office conducts a preliminary reconnaissance study to determine whether the problem can be addressed and whether further study is warranted.

If further study is warranted, the Corps typically seeks agreement from the local sponsor to share costs for a feasibility study. If federal funds are available, the feasibility study moves forward and often includes an economic analysis upon which federal participation hinges because federal cost-sharing requires that the economic benefits of the project exceed the costs. The feasibility report makes recommendations on whether the project is worth pursuing and how the water resource problem should be addressed. In conjunction with the feasibility study, the Corps must also perform the appropriate environmental study under the requirements of the National Environmental Policy Act. After public comments on the environmental study are considered, the Chief of Engineers transmits the final versions of the environmental and feasibility reports to the Congress through the Assistant Secretary of the Army for Civil Works and OMB.

As long as appropriations are available, the Corps will also prepare a pre-construction engineering and design report, which is provided to the authorizing committees. Project construction will occur once the project is authorized and Congress appropriates the federal share of funds to start the project. Upon appropriation of needed funds, and before construction can begin, the Secretary of the Army and nonfederal sponsors generally sign a formal project cooperation agreement. The Corps district office completes the necessary engineering and design work to develop plans and specifications for construction. Private contractors managed by the Corps do the construction work.

***Shortcomings in Economic Analysis***

The Corps has been under close scrutiny concerning its economic analyses and the lack of oversight in economically justifying projects for federal cost-share. In 2000, the Army Inspector General found that three senior Corps officials had manipulated data in the Upper Mississippi River-Illinois Waterway Navigation System feasibility study. Shortcomings in the economic analysis of the Delaware River Deepening Project reported by GAO resulted in the Corps agreeing that a reanalysis was required. GAO has identified a number of additional projects with a number of defects and errors, including relying on long-obsolete data and not incorporating new statistics into the studies. This has been a recurring problem in a number of navigation deepening projects, due in part to optimistic predictions on commerce by the Corps as well as the extreme difficulty in predicting barge and container ship traffic far into the future. Some critics have questioned whether problems in Corps analyses are symptoms of a systemic problem that cannot be rectified by the Corps.

[5] This section largely mirrors the description of Corps' processes contained in Appendix 1, p. 45, of the Government Accountability Office Report, GAO-02-803.

***Corps Improvement Efforts***

The Corps has acknowledged deficiencies and taken steps to improve its economic analysis methods and models, business practices, and efforts to be collaborative and transparent. In addition, the Corps has sought to better match its operations with its evolving civil works mission. The Corps is currently implementing its *Corps 2012* personnel and operations reorganization plan to incorporate managerial best practices and break down stovepiping within areas of Corps expertise.

In addition, the Corps has prepared new regulations for the principles and guidelines under which it plans projects. The Corps is already operating under five Engineering Circulars issued in May 2005. The Engineering Circulars strengthen internal review processes, mandate certified models for all planning activities, establish procedures for peer review of decision documents (including an option for external review), and addresses issues of planning timeframes and collaboration with interested parties. The Engineering Circulars can be adapted if additional needs are identified, until May 2007 when the Circulars become formally binding and regulatory.

## ISSUES TO BE ADDRESSED AT THE HEARING:

- Are Corps' efforts to improve its planning processes adequate?
- What steps are being taken to ensure there is effective oversight of the reprogramming of funds?
- How does the Corps set its priorities in a challenging fiscal environment?
- How can Congress better ensure that the nation's critical water infrastructure needs are met?

## ***Witnesses:***

**Mr. Douglas W. Lamont**, Deputy Assistant Secretary of the Army (Project Planning)

**Ms. Anu Mittal**, Director, Natural Resources and Environment, Government Accountability Office

**Mr. Steve Ellis**, Vice President, Taxpayers for Common Sense

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